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| Subject: Comparing/Comparisons | | **Teacher:** | | **Grade Level:** Fourth | **Date(s):** September 5-9, 2016 | |
| **Curriculum Area:** Math | | | | **I Can Statements &Learning Targets** *(I can……..):*  I can read and write numbers in standard form, word form, and expanded form up to one million.  I can compare two numbers with digits up to one million and identify whether they are less than, greater than, or equal to another number. | | |
| **Content :** *Common Core Standards & Essential Standards*  **4.NBT.2-**Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons**.**  **SPIRAL** - **4.NBT.1 –** [Silent Multiplication](https://docs.google.com/a/bryantschools.org/document/d/1UNLElYQhsv-wCOIuuyF4aE0L7cC5kAadSbBVnlSuEQU/edit?hl=en_US&pli=1)  512 Ants on Sullivan Street by [Carol Losi](http://www.amazon.com/s/ref=dp_byline_sr_book_1?ie=UTF8&field-author=Carol+Losi&search-alias=books&text=Carol+Losi&sort=relevancerank) | | | | **Technology Standards &Resources:**  [**http://www.ncpublicschools.org/docs/acre/standards/new-standards/info-technology/gradek.pdf**](http://www.ncpublicschools.org/docs/acre/standards/new-standards/info-technology/gradek.pdf) **- Grade 4 - pgs. 9-10**  [Fourth Grade Tasks](http://3-5cctask.ncdpi.wikispaces.net/Fourth+Grade+Tasks)  [Mr. Anker Tests 4th Grade Activities](http://www.henryanker.com/4th_Activities.html) (Assessments)  Internet4Classrooms [Common Core Math Tasks](http://www.internet4classrooms.com/common_core/3rd_5th_math_tasks.htm)  ixl[Fourth Grade Math Skills](http://www.ixl.com/math/grade-4) - categorized | | |
| Essential Question(s): *(What question(s) should students be able to answer at the end of the lesson/unit?)*   * How are large numbers estimated? * How do digit values change as they are moved around in large numbers? | | | | **Higher Order Thinking/Revised Blooms:** *(Questions that will enable students to find connections or extend learning.)*  Why do I need to know how to compare, round, add or subtract whole numbers? | | |
| **Vocabulary:** *Academic/Content*  Base ten, Multi-digit, Standard form, Word form, Expanded form, Symbols <, =, >  Less than, Equal to, Greater than, Place value  [Interactive Math Dictionary](http://www.amathsdictionaryforkids.com/) - Demonstrate with students | | | | **Teacher Resources:**  *Utilize Everyday Math Kits for some manipulatives – ie. Number decks, dice, base-10 blocks etc.*  [Math Unpacking Document](http://www.ncpublicschools.org/docs/acre/standards/common-core-tools/unpacking/math/4th.pdf)  [Standards for Mathematical Practice](http://www.corestandards.org/Math/Practice/)  [Blackline Masters](http://wps.ablongman.com/ab_vandewalle_math_6/0,12312,3547876-,00.html)  [Everyday Math Common Core Crosswalk](https://emccss.everydaymathonline.com/em-crosswalk/grades.php?grade=4) | | |
| **Monday**  **Subject Integration:** | **Whole Group**  Reference: [EDM Lesson 2.3](https://www.mheonline.com/emcrosswalk/pdf/4/L02-03.pdf)  Students review basic place-value concepts for whole numbers. They express whole numbers as sums of ones, tens, hundreds, and so on, and observe the relationship between such sums and the way numbers are read.  Remind students that numbers are divided into groups of digits separated by commas. Each group of digits is read as though it is a separate number; then the name of the group is read (with the exception of the ones group).  Visual: Illustrate with a diagram. | | | **Small Group**  **Place Value Dice** - Distribute a set of place value dice to a group of three students. Have one student from the group roll the dice. The group should record the number in standard form and expanded form. Each student takes two turns rolling the dice and recording their numbers. Compare numbers; discuss findings. | | **Independent Work**  **Make Me A Number** Provide students with the following numbers:  **3, 2, 9, 6, 4**  Ask students to use the digits to make the largest number possible (96, 432). Then have students write that number in expanded form.  Ask students to use all of the digits to make the smallest number possible (23,496). Then have students write that number in expanded form.  *Continue with some of the following ideas:*  A number larger than 30,000 that is divisible by 2.  A number between 25,000 and 60,000.  An odd number smaller than 26,000.Explain. |
| **Tuesday**  **Subject Integration:** | **Whole Group**  [Expanded Form Lesson](http://www.studyzone.org/testprep/math4/d/expandedform4l.cfm)  external image How-Much-Is-a-Million-Schwartz-David-M-9780688099336.jpg  How Much is a Million By David Schwartz | | | **Small Group**  [Number, Word, and Expanded Form](http://www.k-5mathteachingresources.com/support-files/numeral-word-expanded-form.pdf)  [DadsWorksheets.com](http://www.dadsworksheets.com/v1/Worksheets/Numbers%20in%20Standard,%20Expanded%20and%20Word%20Form.html)  Given a number, (or several) students write a number that is 20 less, 50 less, a hundred more, a thousand more, etc.? Then they write number in expanded form?  Observe whether problem was written correctly. | | **Independent Work**  [What’s Your Name?](http://www.beaconlearningcenter.com/WebLessons/WhatsYourName/default.htm#page1)  Students practice forms of numbers with immediate feedback.  Extend: Assign a value to each alphabet. Students determine how much their names are worth. |
| **Wednesday**  **Subject Integration:** | **Whole Group**  Review – Compare/order numbers  [Show Me Video](http://www.showme.com/sh/?h=igPbLMm)  Play “I Have, Who Has?” Adjust numbers as needed.  *Model making own game* | | | **Small Group**  [The Place Value Game](https://docs.google.com/a/bryantschools.org/document/d/1SG-QcU1hZlhGniZeu2fPy6rwlMcx7btGH2TEa3ME-uo/edit?hl=en_US&pli=1) - **<> =**  To practice comparing numbers, use a brad fastener and arrows to create < or > in math notebooks | | **Independent Work**  Have students solve word problems comparing numbers.  E-Lab – [Ordering Numbers](http://www.harcourtschool.com/activity/elab2004/gr4/2.html) – Recording sheet will need to be printed (prompted) |
| **Thursday**  **Subject Integration:** | **Whole Group**  Model problem solving  [Turning words into numbers within word problems](https://braingenie.ck12.org/skills/102500) | | | **Small Group**  [Place Value Number Battle](https://docs.google.com/a/bryantschools.org/document/d/1r4FSW29Z_vUfD6SdhxDv_oTU2UV5lubyyuR-Hn_cVFc/edit?hl=en_US&pli=1)  Increase the number of cards as needed | | **Independent Work**  [Naming Numbers Practice Game](http://cemc2.math.uwaterloo.ca/mathfrog/english/kidz/namingnumbers5.shtml) |
| **Friday**  **Subject Integration:**  On Beyond a Million: An Amazing Math JourneyOn Beyond a Million: An Amazing Math Journey by David M. Schwartz | **Whole Group**  Using Data- Provide a list of national parks and their areas. Students will list from greatest to least. List should be from varied states. The number will depend on student readiness. | | | **Small Group**  Using a table to compare numbers.  **Problem Solving Project** – Have students choose a state and find information on its national parks and their sizes. Organize data in a table. Compare data with those of students who chose a different state. | | **Independent Work**  Put the following numbers in order from least to greatest. Explain your answer using specific place value language.  65,783; 56,435; 165,457; 4,398; 6,987; 76,342; 2,651 |
| **Reflection-Checking for Understanding**  Students in need of **remediation**:  **Action/Activities:**  Start small with numbers that end in zero. Example, compare 30 and 50. 60 and 70. 230 and 260, etc. then give numbers where all the digits are different except the hundreds place, example 457 compared to 493. Have them explain their reasoning. Use a number line to demonstrate if necessary.  [Is it 12?](http://rethinkmathematics.com/attachments/File/games/Is_It_12.pdf) - Comparing numbers using <> = | | | **Reflection-Checking for Understanding**  Students on **target:**  **Action/Activities:**  The land area of NC is 53,819 square miles. The land area of SC is  32,020 square miles. Which state has the larger land area?  Students will then research the land areas of other states and write four questions comparing land areas. | | | **Reflection-Checking for Understanding**  Students who need **enrichment:**  **Action/Activities:**  Start a Place Value Webquest–(partners)  <http://zunal.com/evaluation.php?w=27469>  Students will design a place value game for use in the classroom. (5th) |

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| **Common Standards for Mathematical Practices** - Make sense of problems and persevere in solving them; Reason abstractly and quantitatively; Construct viable arguments and critique the reasoning of others; Model with mathematics; Use appropriate tools strategically; Attend to precision; Look for and make use of structure; Look for and express regularity in repeated reasoning |